

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
13 October 2005 (13.10.2005)

PCT

(10) International Publication Number
WO 2005/096223 A2

(51) International Patent Classification⁷: G06N 5/00

(21) International Application Number: PCT/GB2005/001009

(22) International Filing Date: 16 March 2005 (16.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

0407385.4	31 March 2004 (31.03.2004)	GB
0407390.4	31 March 2004 (31.03.2004)	GB
0407311.0	31 March 2004 (31.03.2004)	GB

(71) Applicant (for all designated States except US): BRITISH TELECOMMUNICATIONS PUBLIC LIMITED COMPANY [GB/GB]; 81 NEWGATE STREET, London, Greater London EC1A 7AJ (GB).

(72) Inventors; and

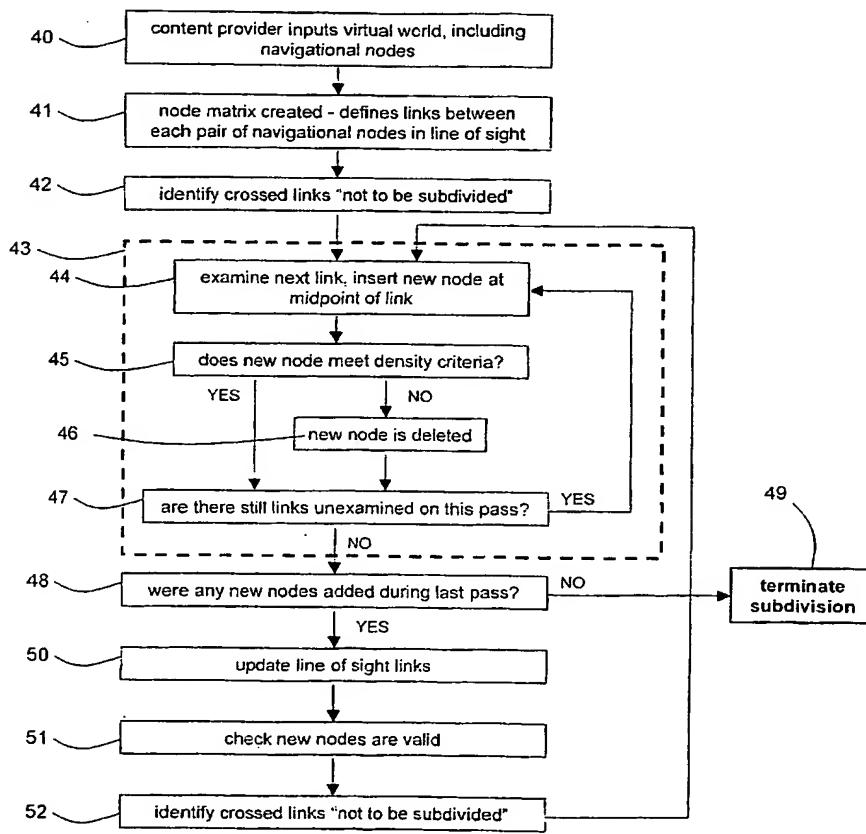
(75) Inventors/Applicants (for US only): TRIMBY, Martin, William [GB/GB]; Flat 2, 4 Market Hill, Framlingham, Woodbridge, Kesgrave, Ipswich, Suffolk IP13 9BA (GB). GILLIES, Marco, Fyse, Pietro [GB/GB]; 170 COURT LANE, London, Greater London SE21 7ED (GB). BALLIN, Daniel [GB/GB]; FLAT 5, 65 London Road, Ipswich, Suffolk IP1 2HF (GB).

(74) Agent: LOFTING, Coreena, Fiona, Anne; BT GROUP Legal Intellectual Property Department, PP C5A, BT Centre, 81 Newgate Street, London, Greater London EC1A 7AJ (GB).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,

[Continued on next page]

(54) Title: PATHFINDING SYSTEM



(57) Abstract: A computer system is arranged to automatically calculate a path along nodes in a virtual world. After the co-ordinates for the virtual world environment have been initially defined (40), including nodes along which a path may travel, the system automatically increases the density of nodes in the environment up to a desired density. New nodes are added between each pair of nodes which have line of sight to each other (44 to 47), dramatically increasing the number of available links and nodes. This is repeated until a sufficient density of nodes is reached and no more nodes are being added (48 and 49).

WO 2005/096223 A2



MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TI, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(84) **Designated States (unless otherwise indicated, for every kind of regional protection available):** ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,